

Common Disease - by milk.

1. Bovine T. B. by pasteurization

Preventable

1. 9.6% caused by still infects children under 4 yrs.

2. Ingestion infection

3. Controlled by pasteurization.

2. Typhoid & Paratyphoid Fever

1. Most frequent.

2. " cases from new milk.

3. Septic Sore Throat, flu, scarlet fever from streptococcus in milk

4. Undulant Fever in U. S.

Supervised Herd Plan.

1. Any owner can have his cows T. B. tested.
2. All positives must be slaughtered.
3. No compensation.

Accredited Herds -

1. Herds must that have passed 2 clean tests at intervals of 6 mo. or if positives are found - intervals of 6 mo.
2. " " " " herd is tested " " "
3. Man must have 10 cattle reg. & have a membership in Accredited Herd Plan.

Bang's Disease

1. High in animals
2. Communicable to humans.
3. 1896 Prof. Bang - Denmark.
4. If they have disease - branded & isolated.

Herds - Only definite way of detecting animal diseases.

Controlling Contamination of Milk.

1. Sediment Test

- a. overstressed.
- b. result visible to eye but doesn't show presence of dissolved dirt or infection & coming to dairy.
- c. Chlorine cleansing insufficient at farms.

ii. Cooling - " cans immersed in ice or water & thermometer.

iii. Control of Pasteurization

1. methylene blue reduction test.
2. Coliform Test
3. Phosphate "

Producer & Safe Milk -

1. Responsible - Health of animals, sanitation.
Provision for even supply & reg. daily delivery
of milk to urban cities.

2. Eradication of Bongo, mastitis & Bovine T. B.

3. Pasteurizer will make milk from diseased animals
safe - but not dirt laden milk clean.

4. Hay supply in barn, dust or stable conditions
- rosy milk.

5. Feed carefully & flavours, reg. for supply & scientific
quality of milk & animal.

6. As soon as milk drawn - cooled to $40 \text{ or } 50^{\circ} \text{ F.}$

Cleansing & Disinfection in Small Dairy -

Cleansing - process whereby an unclean
surface action of detergent sol. to remove
all visible dirt.

Disinfection - subsequent treatment rec. 2
destroy remaining bacteria or visible contamination.

Way of Assuring a Sanitary Dairy -

1. Possession of plant & equip readily cleaned.
2. Desire of intelligent dairyman for cleanliness.
3. Use of compounds which R good detergents &
good rinsing properties. Hand washing - free
from hydroxide.

4. Disinfecting Agents - steam, hot water, chemical
sterilizer, Chlorine with steam or hot water.

5. Equipment cleansed right after process
operations - rinsed, soaked & brushed with warm
washing sol. - rinsed again with H_2O - & a
satisfact. bactericidal treatment (Chlorine) 100
parts per million of chlorine - contact periods - 2 min.

6. All piping removed daily.

7. Bottles - washed by hand or machine.
where no steam - motor driven brush & 3 compart-
ment wash & rinse tank. Then rinsed again in
warm H_2O & disinfected in a chlorine sol;
 H_2O - 110° F.

Mechanical Washing - H_2O Sol. - $120^{\circ}F$.
1st rinse - $150^{\circ}F$.
2nd .. - $180^{\circ}F$.

8. Can Washing & Sterilizing - Same as bottles in small dairy - steam sterilizing. Rinses carefully cleaned.

9. Periodic Checks - visual & lab tests - milk tested. Bottles, cans, etc. Consists of rinsing with a known quantity of sterile H_2O & making a standard plate count of the final water.

Diseases Due to Deficiency of Food Report 9

Body needs food - growth
body .. & metabolism
energy.

2 Classes:-

1. Fuel
2. Building

most common foods contain both - milk
many only one - starch, fuel.

Cause of malnutrition various.

1. worry.
2. lack of Ex.
3. senescence
4. low income.
5. not knowing.

Disturbances of continuous transport found in food
& essential to normal metabolism & growth
Def A - lack - scurvy - disease of dogs
night blindness.

not found in yellow veg.

Def B - Beriberi - cardiac weakness, edema,
peripheral neuritis, with eggs & thiamine
milk. Beriberi in Japan by 2 most common

B₁ - thiamine - disease of ^{nerves} ~~of~~
stimulates appetite & imp. in maintaining
maturity of digestive tract.

B₂ - B₆ - B₁₂ - Imp. to mammals.

B₂ & B₆ - Pellagra - ^{acid} ~~acid~~ ^{gastro-intestinal} Tal disturbances
pernicious anemia - ^{gastro-intestinal} Tal disturbances

Feed beef & veget. ^{Other diseases in Europe & Japan} T.B. syphilis, etc.

Protein

Vit C - scurvy - contained in much of the fruit
by leaf. Chatterbox - hemorrhages.

found in fruit - soil veg.

Vit D - rickets - marked alterations of bones -
soft & pliable - lack of deposit of
normal bone. Signs - Conspicuous
scantily. Not in sunny places

Prevention - lot of exposure to sun - esp in winter
mercury - vapor with lamp -

Red liver Oil.

Vit E - reproduction?
Yellow seeds of low meat, wheat
green - lettuce, etc. leafy veg.

Vit K - want for maintenance & clotting of
blood. Def. - blood losses, wounds &
shot. milky - scurvy - genuine.

Goiter - thyroid - lack of iodine

more frequent { during fetal life
puberty pregnancy
Endemic - in vicinities where there is less iodine. Exophthalmic - a
rare condition in individuals.

Diabetes - Def. - loss of sugar
in urine.

Nelitis

Deficiency of correct production of insulin
of pancreas.

Accumulation of fatty tissue in body.

Endulgence, overeating tho' sometimes hereditary.

Ventilation.

Report 10.

Air - Car di .04%
O₂ - 20%
N - 80%

1. Movement - free moving safe.

Draught beneficial.

Temp. Humidity + motion - imp. - not composition

Temp. raised by bodies.

Good vent - cool air - not cold

Humidity relative to temp.

Constantly increased by moisture of human body.

Treating impure air by contact of outside air.

Impure air comes from our bodies - breathing, etc.

Industrial Ventilation.

Natural System -

Mechanical System - air moved by fans.

Dust - collection close to source as possible.

Methods - Drive air by fans - suck out old air.

Windows on 2 sides of room.

In Mines - 1. Safety for underground workers.

2. To remove gases + dust.

3. To provide air flow during emergency.

Object of Ventilation.

1. Keep air continually changing in room
2. Even temp - 68° F
3. Avoid excessive dryness.

Suggestions for good Vent.

1. Have them placed away from radiator
2. Open Wind. Top + bottom.
3. 400 cu
4. Engulf heat + constant circulation

5. Ventilate by several small openings instead of 1 large one.
 6. Bedroom windows were opened.
 7. Kitchen well aired - not fumes this house.
 8. Place humidifiers placed in room near radio.
- Air breathed in 68° - warmed to body temp.

Tests -

1. Comfort of occupants.
2. Ability of those in Room 2 work.
3. General health of " " " "
4. 2nd School - if floor cold - badly ventilated.

all effects Experienced by Body in bad vent.

causes:

1. elevation of body temp.
2. Increase in reclining heat of body.
3. slight lowering of blood pressure.
4. no effect on rate of respiration acidosis of blood or disorientation of O₂ - hemoglobin and rate of metabolism.
5. Inclination

Stagnant air - Lack of appetite - Area of stagnant air around body producing effects by excess body heat

Outdoor

20.81 O₂
79.51 nitrogen
100.03 CO₂

Volume

16.03 O₂
79.55 N₂
4.38 CO₂

Principles of Natural Heating.

1. Heat burned: heat comes from sun or
heat in water or steam & is part of building.
3 ways of sending heat to room:
 1. warm air system
 2. Steam radiators
 3. Hot water
2. Warm air system - recirculating, free flow in
flow in outside of room. With fan.
3. Steam system - condensation of S. in radiators. Enters
from top - pipe or other end at bottom returns to
boiler back to furnace as water.
4. Hot water system - Must be full of water - no air.
Tank & overflow.

Food in Home -

1. Kitchen not suitable - large & messy - sink
with H & C. H₂O - with steam & ventilated
2. Cook - clean room - Radiator in corner of room.
Free from chimneys - skin & 3 by panels, etc.
3. Sink - separate - splashless - free from insects.
4. Preparation food:
 1. Wash fingers
 2. Collect raw food.
 3. Dip open food in
 4. Sweep under food out
 5. Wash all fronts & veg
 6. Run of milk top
5. Refrid - Imp. - keep milk, etc. Spillages.
Sept covered
6. Roasting - No open flame & apparatus
Increase digestibility - full digestion.

Cleaning in Home -

1. Kitchen - not dark & damp - food stored
easy & clean. White washed.

2. Bathroom - Toilet cleaned & filled
with H_2O . Care with colder type. etc.
Cleaned often & carefully. Clean window. Wash
tub on each floor. & frequent hand washing
If cold washed with ammonia, alcohol, etc.
Cleaning houses - paper slats & slats & good
size of tub. Shower & large no. Wash and
Cleaning - Vacuum - as spring housekeeping.
Washing cloth hanging out.

Floor - clean cloth with ammonia. Wax - holds sand.
Clean books - scraps removed - moved - clean very
carefully. No. nearly boiling. Change water.

3. Bed & Bath - clean & fresh. Bed after no. moved.
Clean left in wet bed. More & long and in
older or new. Wash from above.

Personal Interiors - infection. Wash the hands.
Wash in soap & strong soap.

Pets - Quarantine free from above & clean.
Cats & dogs, swine, & other animals. Wash
naked kept in. Wash
Wash often. Wash with
Wash of chairs, cushions, etc. Wash from above.

Wash from Rabies. up

Orthoceros - from feet birds.